

REMARKS

In the Office Action, the Examiner rejected claims 1-11 and 17-22 and withdrew claims 12-16 from consideration. By this paper, Applicants cancelled claims 12-16. Upon entry of these amendments, claims 1-11 and 17-22 remain pending in the present application and are believed to be in condition for allowance. Lastly, Applicants note that the Examiner did not address the subject matter of present independent claim 7, and therefore, the Office Action is incomplete. Consequently, the next Office Action cannot be made final. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

Restriction Requirement

On August 26, 2005, the Examiner contacted Applicants' representative, Michael G. Fletcher, regarding the restriction of the present application. Specifically, the Examiner restricted claims 1-11 and 17-22 to Group I as being drawn to a polymerization process, and claims 12-16 to Group II as being drawn to a slurry polymerization reactor. Applicants provisionally elected to prosecute the claims of Group I at that time.

Applicants affirm the election of the claims of Group I. Therefore, Applicants have canceled claims 12-16 without prejudice for possible inclusion in a divisional application.

Claim Rejections under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-11 and 17-22 under U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Stanley et al. (U.S. Patent No. 3,244,681). Claims 1 and 7 are independent. Applicants respectfully traverse this rejection.

Legal Precedent

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). Every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). The prior art reference also must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

If the Examiner relies on a theory of inherency, the extrinsic evidence must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *In re Robertson*, 169 F.3d 743, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999). In relying upon the theory of inherency, the Examiner bears the evidentiary burden and must provide a basis in fact and/or technical reasoning to reasonably support the determination that the

allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

Independent Claim 1

Turning to the claims, the present independent claim 1 recites “polymerizing in a loop reactor . . . at least one olefin monomer . . . *wherein said inner surface of said loop reactor has a root mean square surface roughness less than about 120 micro inches.*” (Emphasis added).

In the Office Action, the Examiner contended that the Stanley reference suggests use of “a loop reactor having a reactor zone (inner surfaces) with [sic] smooth surface, or a smooth as possible.” Office Action, page 5. The Examiner stated that he “has a reasonable basis to believe that the claimed smoothness properties are inherently possessed in Stanley et al.” *Id.* (emphasis added). The Examiner concluded that since “the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise.” Office Action page 5 (emphasis added) (citing *In re Best*, 195 USPQ 430 (C.C.P.A. 1977) and *In re Fitzgerald*, 205 U.S.P.Q. 594 (C.C.P.A. 1980)).

The Examiner’s rejection is flawed for a number of reasons. As noted above, a rejection under 35 U.S.C. § 102 requires that a single reference teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). The Stanley reference does not disclose a loop reactor having “a root mean square

surface roughness less than about 120 micro inches,” as claimed. Therefore, the Stanley reference cannot anticipate claim 1 or its dependent claims.

In addressing this deficiency of the Stanley reference, the Examiner relied upon the principle of inherency to establish that all of the missing elements are present in the Stanley reference. Such reliance on inherency is misplaced. As noted above, in establishing inherency, the extrinsic evidence must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *In re Robertson*, 169 F.3d at 743. Here, while the Stanley reference mentions “a tubular closed loop reaction zone having smooth surfaces,” the Examiner has not shown that the Stanley surfaces necessarily possess a root mean square surface roughness less than about 120 micro inches. See Stanley, col. 1, lines 60-65. The Examiner falls short of meeting his evidentiary burden. For these reasons, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 102.

Furthermore, Applicants stress that the Examiner’s reference to the *In re Best* and *In re Fitzgerald* cases is misplaced. See Office Action, page 5 (citing *In re Best*, 195 U.S.P.Q. at 430 and *In re Fitzgerald*, 205 U.S.P.Q. at 594). The reasoning in these two cases with regard to the evidentiary burden of the PTO is directed to product-by-process type claims where it is difficult for the PTO to show that a unique process provides claimed physical characteristics. See, e.g., *In re Best*, 195 U.S.P.Q. at 432-33. In contrast, here, Applicants do *not* require a unique method to provide the presently

claimed roughness values of the inner surface of the loop reactor. In addition, the roughness of a surface having the claimed roughness values is readily measurable.

Independent Claim 7

Independent claim 7 recites “a first polymerization step . . . to produce . . . solid olefin polymer particles having a melt index less than 0.3 gm/10 min; and a second polymerization step . . . to produce . . . solid olefin polymer particles having a melt index greater than 0.4 gm/10 min.” Initially, Applicants emphasize that the Stanley reference does not teach or suggest these recited features. Further, as mentioned, the Examiner did *not* address the subject matter of independent claim 7. Therefore, Applicants respectfully request that the Examiner address the specific subject matter of claim 7 or withdraw the rejection of claim 7 and its dependent claims. Applicants remind the Examiner that “[i]n order to provide a complete application file history and to enhance the clarity of the prosecution history record, an examiner *must* provide clear explanations by all actions taken by the examiner during prosecution of an application.” M.P.E.P. § 707.07(d) (emphasis added).

Claim Rejections under 35 U.S.C. § 103(a)

As indicated, the Examiner *alternatively* rejected claims 1-11 and 17-22 under 35 U.S.C. § 103(a) as obvious over Stanley et al. (U.S. Patent No. 3,244,681). Applicants traverse this rejection.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). To establish a *prima facie* case, the Examiner must not only show that a modified reference includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the reference. *See Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). The Examiner must provide objective evidence, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *See In re Lee*, 61 U.S.P.Q.2d. 1430 (Fed. Cir. 2002).

Independent Claims 1 and 7

As noted above with regard to the rejection under 35 U.S.C. § 102, the Stanley reference does *not* teach all of the elements of the independent claims 1 and 7, nor does it suggest such elements. Accordingly, Applicants respectfully request that the Examiner to withdraw the rejection under 35 U.S.C. § 103 and allow claims 1-11 and 17-22.

Moreover, Applicants emphasize that the Examiner *must* address the subject matter of independent claim 7 to reject claim 7 under Section 103. Indeed, to establish *prima facie* obviousness of a claimed invention, the Examiner must show that all the claim limitations are taught or are suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974); M.P.E.P. § 2144.03. Here, the Examiner did *not*

specifically address independent claim 7. Accordingly, Applicants again traverse these unsupported rejections of independent claim 7.

In addition, with regard to both independent claims 1 and 7, the Examiner failed to provide a difference, a modification, and an explanation which would support an obviousness rejection and which might be responded to by Applicants. “It is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given a fair opportunity to reply.” M.P.E.P., §706.02(j). In this instance, Applicants are unfairly prejudiced by not being provided what the Examiner considers to be the distinction between the reference and the claims, the proposed modification, and the presumed suggestion or motivation to make the modification as provided by the reference. The failure of the Examiner to provide the noted information precludes a *prima facie* case of obviousness from being established.

Such a *prima facie* case must demonstrate some suggestion or motivation to modify the reference, a reasonable expectation of success, and that all the claim elements are taught or suggested by the prior art reference. M.P.E.P., §706.02(j). Applicants respectfully submit that the Examiner did not establish these required components of a *prima facie* case based on the Samaras reference. As discussed, the Stanley reference fails to teach or suggest all the elements of the instant claims. Further, there is no suggestion or motivation within the Stanley reference to modify the disclosed configuration to correspond to the recitations in the present claims. Likewise, considering the silence of the Stanley reference as to any suggestion to modify the

disclosed configuration, the Stanley reference is also silent as to the likelihood of success of any such modification.

Accordingly, Applicants respectfully request that the Examiner withdraw the rejection under 35 U.S.C. § 103 and to allow pending claims 1-11 and 17-22.

CONCLUSION

Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

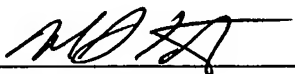
Authorization for Extensions of Time and Payment of Fees

In accordance with 37 C.F.R. § 1.136, Applicants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request thereof. The Commissioner is authorized to charge any additional fees which may be required to Deposit Account No. 06-1315; Order No.

CPCM:0020/FLE.

Respectfully submitted,

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Michael G. Fletcher
Registration No. 32,777
FLETCHER YODER
P.O. Box 692289
Houston, TX 77269-2289
(281) 970-4545